

**LISTING OF CLAIMS**

Please cancel claims 11-18, 35 and 36. This listing of claims, if entered, replaces all prior versions of the claims.

1. (Original) A method, comprising:  
accessing data representing an interconnect model, wherein the interconnect model includes a driving point node, and wherein the interconnect model is not a lumped capacitance model;  
calculating an effective capacitance of the interconnect model to be inversely proportional to a voltage at the driving point node of the interconnect model; and  
storing a value representing the effective capacitance.
2. (Original) The method of claim 1, wherein  
said calculating calculates the effective capacitance to be directly proportional to a sum of one or more products, wherein each of the one or more products equals a product of a respective one of one or more capacitances included in the interconnect model and a voltage across the respective one of the one or more capacitances.
3. (Original) The method of claim 1, wherein  
said accessing further comprises accessing data representing a driver model; and  
said calculating comprises calculating the effective capacitance as a function of a resistance included in the driver model.
4. (Original) The method of claim 1, wherein  
said calculating is performed without using numerical techniques.
5. (Original) The method of claim 1, wherein  
the interconnect model is a pi model.
6. (Original) The method of claim 5, further comprising:

calculating a plurality of time constants from a plurality of capacitances and a resistance included in the pi model and from a resistance included in a driver model of a driver coupled to an interconnect modeled by the interconnect model; and using the plurality of time constants to perform said calculating the effective capacitance.

7. (Original) The method of claim 1, wherein:

the interconnect model includes one or more inductances.

8. (Original) The method of claim 1, wherein:

said calculating the value of the effective capacitance is performed according to a closed form algorithm.

9. (Original) The method of claim 1, wherein

said storing comprises storing the effective capacitance value in a lookup table.

10. (Original) The method of claim 9, further comprising:

repeating said calculating and said storing for each of a plurality of different values of the one or more capacitances in the interconnect model.

11-18. (Canceled)

19. (Original) A system, comprising a processor and a memory storing program instructions executable by the processor to:

access data representing an interconnect model, wherein the interconnect model includes a driving point node, and wherein the interconnect model is not a lumped capacitance model;

calculate an effective capacitance of the interconnect model to be inversely proportional to a voltage at the driving point node of the interconnect model; and store a value representing the effective capacitance.

20. (Original) The system of claim 19, wherein the program instructions are executable by the processor to:

calculate the effective capacitance to be directly proportional to a sum of one or more products, wherein each of the one or more products equals a product of a respective one of one or more capacitances included in the interconnect model and a voltage across the respective one of the one or more capacitances.

21. (Original) The system of claim 19, wherein the program instructions are executable by the processor to:
  - access data representing a driver model; and
  - calculate the effective capacitance as a function of a resistance included in the driver model.

22. (Original) The system of claim 19, wherein the program instructions are executable by the processor to:
  - calculate the effective capacitance without using numerical techniques.

23. (Original) The system of claim 19, wherein the interconnect model is a pi model.

24. (Original) The system of claim 19, wherein:
  - the interconnect model includes one or more inductances.

25. (Original) The system of claim 19, wherein the program instructions are executable by the processor to:
  - calculate the effective capacitance according to a closed form algorithm.

26. (Original) The system of claim 19, wherein the program instructions are executable by the processor to:
  - store the value representing the effective capacitance in a lookup table.

27. (Original) A computer readable medium, comprising program instructions executable to:

access data representing an interconnect model, wherein the interconnect model includes a driving point node, and wherein the interconnect model is not a lumped capacitance model;

calculate an effective capacitance of the interconnect model to be inversely proportional to a voltage at the driving point node of the interconnect model; and store a value representing the effective capacitance.

28. (Original) The computer readable medium of claim 27, wherein the program instructions are executable to:

calculate the effective capacitance to be directly proportional to a sum of one or more products, wherein each of the one or more products equals a product of a respective one of one or more capacitances included in the interconnect model and a voltage across the respective one of the one or more capacitances.

29. (Original) The computer readable medium of claim 27, wherein the program instructions are executable to:

access data representing a driver model; and calculate the effective capacitance as a function of a resistance included in the driver model.

30. (Original) The computer readable medium of claim 27, wherein the program instructions are executable to:

calculate the effective capacitance without using numerical techniques.

31. (Original) The computer readable medium of claim 27, wherein the interconnect model is a pi model.

32. (Original) The computer readable medium of claim 27, wherein: the interconnect model includes one or more inductances.

33. (Original) The computer readable medium of claim 27, wherein the program instructions are executable to:

calculate the effective capacitance according to a closed form algorithm.

34. (Original) The computer readable medium of claim 27, wherein the program instructions are executable to:

store the value representing the effective capacitance in a lookup table.

35-36. (Canceled)